WHAT IS CLAIMED IS:

1	1. A metal detection circuit comprising:				
2	a power source;				
3	at least one transmitter circuit electrically coupled to the power source;				
4	a transmit coil electrically coupled to the at least one transmitter circuit;				
5	at least one receiver coil;				
6	an amplifier electrically coupled to the at least one receiver coil;				
7	an integrator electrically coupled to the amplifier;				
8	a track/hold circuit electrically coupled to the integrator; and				
9	a filter electrically coupled to the track/hold circuit and an output.				
1	2. A circuit in accordance with claim 1 wherein the filter is a bandpass	,			
2	filter.				
1	3. A circuit in accordance with claim1 wherein the transmitter circuit				
2	comprises a coil charge circuit.				
1	4. A circuit in accordance with claim 1 comprising two receiver coils				
2	each electrically coupled to the amplifier.				
1	5. A circuit in accordance with claim 1 wherein the track/hold circuit				
2	comprises a first stage that includes an input resistor, an op-amp, an integrator capacitor, an	nć			
3	a C-Mos SPDT switch, and a second stage that includes two passive RC filters and an op-				
4	amp buffer.				
1	6. A circuit in accordance with claim 1 wherein the power source				
2	comprises a voltage source in the form of one of a battery, a battery of solar cells, a standard	rd			
3	A/C source or a generator.				
1	7. A metal detection circuit arrangement for a portable walk-through				
2	metal detector comprising a plurality of opposing pairs of sensor panels, each sensor panel	ı			
3	pair comprising a circuit portion comprising:				
4	at least one transmitter circuit electrically coupled to the power source;				
5	a transmit coil electrically coupled to the at least one transmitter circuit;				
6	at least one receiver coil;				
7	an amplifier electrically coupled to the at least one receiver coil;				
8	an integrator electrically coupled to the amplifier;				
9	a track/hold circuit electrically coupled to the integrator; and				
10	a filter electrically coupled to the track/hold circuit and an output.				

1		8.	A circuit arrangement in accordance with claim 7 wherein the filter is a		
2	bandpass filte	r.			
1		9.	A circuit arrangement in accordance with claim7 wherein the		
2	transmitter cir	cuit co	nprises a coil charge circuit.		
1		10.	A circuit arrangement in accordance with claim 7 wherein each circuit		
2	portion compi	rises tw	o receiver coils each electrically coupled to the amplifier.		
1		11.	A circuit arrangement in accordance with claim 7 wherein the		
2	track/hold circ	cuit con	nprises a first stage that includes an input resistor, an op-amp, an		
3	integrator capacitor, and a C-Mos SPDT switch, and a second stage that includes two passive				
4	RC filters and an op-amp buffer.				
1		12.	A circuit arrangement in accordance with claim 7 further comprising a		
2	power source comprising at least one voltage source in the form of one of a battery, a battery				
3	of solar cells, a standard A/C source or a generator.				
1		13.	A modular walk-through metal detector comprising:		
2		a plura	ality of separate sensor panels arranged in opposing pairs electrically		
3	coupled to each other and arranged one above the other along two separate sides to form two				
4	side walls; and	d			
5		at leas	t one top cross-member that engages each side wall;		
6		where	in each opposing sensor panel pair comprises a circuit portion		
7	comprising:				
8			at least one transmitter circuit electrically coupled to the power source;		
9			a transmit coil electrically coupled to the at least one transmitter		
10	circuit;		•		
11			at least one receiver coil;		
12			an amplifier electrically coupled to the at least one receiver coil;		
13			an integrator electrically coupled to the amplifier;		
14			a track/hold circuit electrically coupled to the integrator; and		
15			a filter electrically coupled to the track/hold circuit and an output.		
1		14.	A metal detector in accordance with claim 13 wherein the filter is a		
2	bandpass filte	r.			
1		15.	A metal detector in accordance with claim 13 wherein the transmitter		
2	circuit comprises a coil charge circuit.				
1		16.	A metal detector in accordance with claim 13 wherein each circuit		
2	portion compr	rises tw	o receiver coils each electrically coupled to the amplifier.		

1	17. A metal detector in accordance with claim 13 wherein the track/hold
2	circuit comprises a first stage that includes an input resistor, an op-amp, an integrator
3	capacitor, and a C-Mos SPDT switch, and a second stage that includes two passive RC filters
4	and an op-amp buffer.
1	18. A metal detector in accordance with claim 13 further comprising a

- 18. A metal detector in accordance with claim 13 further comprising a power source comprising at least one voltage source in the form of one of a battery, a battery of solar cells, a standard A/C source or a generator.
- 19. A metal detector in accordance with claim 13 wherein each opposing sensor panel pair is interchangeable.
- 20. A metal detector in accordance with claim 13 further comprising at least one base coupled to each side wall.
- 1 21. A metal detector in accordance with claim 13 wherein the base comprises at least two base members.

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- 22. A metal detector in accordance with claim 13 wherein the metal detector comprises six sensor panels, each side wall comprising three sensor panels.
- 1 23. A metal detector in accordance with claim 13 wherein each sensor 2 panel comprises windowed areas.
- 1 24. A metal detector in accordance with claim 23 wherein each sensor 2 panel comprises a weather-proof construction.
- 1 25. A metal detector in accordance with claim 13 wherein the sensor 2 panels may be stored in the top cross-member and the top cross member includes at least one 3 handle and at least two wheels.